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(54) Title: THERMOSTABLE ALPHA-AMYLASES

(57) Abstract: An isolated polynucleotide comprising an open reading frame encoding a polypeptide having alpha-amylase activity, the polypeptide selected from the group consisting of: a) a polypeptide comprising an amino acid sequence which has at least 70% identity with amino acids 22 to 450 of SEQ ID NO:4; b) a polypeptide comprising an amino acid sequence which has at least 70% identity with the polypeptide encoded by the amylase encoding part of the polynucleotide inserted into a plasmid present in the E. coli host deposited under the Budapest Treaty with DSMZ under accession number DSM 15334; c) a polypeptide encoded by a polynucleotide comprising a nucleotide sequence which has at least 70% identity with the sequence shown from position 68 to 1417 in SEQ ID NO:3; and d) a fragment of (a), (b) or (c) that has alpha-amylase activity.

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# INTERNATIONAL SEARCH REPORT

Interna Application No  
PCT/DK 03/00882

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/30 C12N15/56 //A23D8/04, D06L1/14, (C12N9/30,  
C12R1:645)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Developments in industrial microbiology" A PUBLICATION OF THE SOCIETY FOR INDUSTRIAL MICROBIOLOGY, PROCEEDINGS OF THE THIRTY-SIXTH GENERAL MEETING OF THE SOCIETY FOR INDUSTRIAL MICROBIOLOGY, vol. 21, 11 - 17 August 1979, pages 327-337, XP002276036 Pittsburgh, Pennsylvania the whole document	1-16, 18-29
Y	---	10-17
X	WO 96 01323 A (DANISCO ;MICHELSEN BIRGIT (DK); RASMUSSEN PREBEN (DK)) 18 January 1996 (1996-01-18) the whole document --- -/--	1-29

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

5 April 2004

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Internat Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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Application No

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